ATTACHMENT 7 – Program Preferences; Poso Creek IRWM Drought Proposal

Requirements
How the Proposal assists in meeting the Program Preference(s) described in Section II.F of the 2014 IRWM Drought Guidelines.
Describe any issues related to the Human right to Water Policy and the IRWM region's effort to address the goal of the Human Right to Water Policy

This section discusses how the three proposed projects of Poso Creek IRWM Drought Proposal assists in meeting the Program Preferences, as stated in PRC §75026.(b) and CWC §10544.

Include regional projects or programs (CWC §10544) – The Calloway Canal is considered to be a water conveyance facility with regional importance. This is evidenced by the fact that improvements to the Calloway Canal (including lining) were identified in the 2007 Poso Creek IRWM Plan. In particular, it was identified in that plan as Project Number 10 "Calloway Canal Improvements". The Calloway Canal Improvements is a significant regional conveyance improvement undertaken by North Kern and Cawelo that involves lining 12,554 LF (2.38 miles) of the Calloway Canal. The size or cross-section of the conveyance facility to be lined is a 50 foot wide bottom with two 29 foot side slopes. This conveyance improvement provides a new delivery route linking two recently constructed regional interties.

Lost Hills Utility Project (Projects 2) and the City of McFarland (Project 3) are two DAC projects to be implemented that will advance the Poso Creek IRWM Plan's regional program to assist DAC communities in meeting their critical drinking water supply, treatment, and wastewater needs.

Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR - Poso Creek IRWM Region is in the Poso Hydrologic Unit, a water-short area; accordingly, water conservation is not only important, but it is a necessity. Regionally, a number of factors have contributed to a significant reduction in water supply reliability going forward. This is well documented in the 2007 IRWMP for the Poso Creek Region. As a State Water Project contractor (through the Kern County Water Agency), Cawelo receives a substantial portion of its supply from the California Bay-Delta. In addition to implementing one of the Efficient Water Management Practices ("EWMPs") identified in the Water Code (namely, §10608.48(c)(5)), two of CALFED's "targeted benefits" (TB) will be furthered. In this regard, Cawelo is located in CALFED's Sub-Region 20 (Eastern Kern County). In the draft "Details of Quantifiable Objectives" for Sub-Region 20, Table A.20.1 describes TB 194 as follows: "Provide long-term diversion flexibility to increase the water supply for beneficial uses." By definition, the proposed Project No 1 seeks to increase the amount of water available for beneficial uses. While not a Targeted Benefit for eastern Kern County, reducing flows to salt sinks is a targeted benefit in Sub-Region 19 (Western Kern County). Though it does not involve a "salt sink", the proposed Project would have the same effect, i.e., by avoiding seepage to groundwater which is irrecoverable for beneficial uses (without treatment).

The Calloway Canal has an 800 cfs design capacity and will operate up to 400 cfs in coordination with two large interties, allowing a new, more effective route for surface water deliveries to irrigators in three districts and by exchange with two additional districts. The improved Calloway Canal will allow the use of this new regional conveyance route for delivery of surface water supplies into the Poso Hydrologic Region on the San Joaquin Valley – Kern County Groundwater Basin.

Effectively resolve significant water-related conflicts within or between regions - The two DAC community projects will help alleviate potential conflict that may arise within the Poso Region if the groundwater levels continue to decline due to the drought, which may lead to a loss of well production and an increase in arsenic concentrations. The Calloway Canal Improvement project helps to resolve conflicts with environmental water use outside the Poso Region as it add flexibility in receiving surface water deliveries that become available on a schedule driven by the timing of flows needed for fish, which are not always in sync with the timing of deliveries for crop water needs.

Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program

Reduce existing irrecoverable losses – Lining the Calloway Canal will increase the overall volume of available water delivered to the agriculture districts. The Project will effectively eliminate canal seepage in an area underlain by groundwater with poorer quality and deliver the conserved water to district that overlie groundwater that is suitable for beneficial uses. This conveyance improvement will increase efficiency and increase the overall volume of water available for beneficial use since these seapage losses presently are considered irrecoverable without treatment.

Achieve multiple benefits – The Proposal can achieve multiple benefits. The multiple benefits associated with the proposed Project include reduced energy use and reduced GHG emissions.

Preserve local flexibility - The Proposal will contribute to local flexibility by conserving available surface water supplies and reducing dependence on the underlying groundwater basin, thereby improving water supply reliability. It is noteworthy that the groundwater basin can be characterized as regional, i.e., what benefits one district benefits neighboring districts as well (and vice versa). In addition, the improvements to the Calloway Canal -- a conveyance facility of regional importance -- will enhance water exchanges between neighboring districts.

Build on existing water use efficiency programs - The Calloway Canal lining improvements will enhance the effectiveness of North Kern and Cawelo's existing conjunctive use program by improving water conveyance efficiency. Cawelo's in-district distribution system consists entirely of lined canals and buried pipelines as does the majority of North Kern's delivery system.

Address critical water supply or water quality needs of DACs within the region - Constructing the projects for the DAC communities will enable them to address immediate drought issues related to potential increased arsenic concentrations in their source water for drinking water. As groundwater levels decrease, DAC communities are at risk of losing water production from older, shallower, wells and increasing arsenic concentrations. By making the improvements, DAC communities gains reliability, ensures protection of long-term drinking water needs, and assist the Region in meeting the Human Rights to Water Policy.

Effectively integrate water management with land use planning - The Region contains predominately agriculture land use with small DAC communities intermixed. Implementing the projects in the Proposal will improve communication among DAC communities within the Region; both the DAC communities and the agricultural districts rely on the regional groundwater basin. The severe 2014 drought has followed drought years of 2012 and 2013, something very difficult for land use planning to predict. Districts within the Region have purchased land to remove it from agricultural production, have converted land to recharge basins, and are identifying programs to continue with voluntary and possible

district sponsored land retirement. The local economy and land use is being affected by the drought; the agricultural water districts are stretched for resources while completing an important regional conveyance improvement during a time of limited water revenue due to lack of surface water deliveries.

Are part of an IRWM Plan that helps the region reduce reliance on the Sacramento-San Joaquin Delta for water supply (for IRWM regions that receive water from the Sacramento-San Joaquin Delta)

North Kern has participated in the construction of four interties leading up to the Calloway Canal Improvements to effectively integrate regional water management that helps the region reduce reliance on the Sacramento-San Joaquin Delta. The regional conveyance improvements utilized federal grants and $10M in local bond funds. The four intertie improvements were constructed since 2011, about the time the three year drought started. Over the past twenty years, Cawelo has developed the reuse of over 30,000 AFY of oil-field produced water, which reduces the Region's reliance on the Delta.

Address statewide priorities (Table 1 establishes the specific Statewide Priorities for the IRWM Grant Program.)

The purpose of this Proposal is to help alleviate the drought impact(s). All three projects will provide immediate regional drought preparedness. Project 1 will promote regional water conservation, conjunctive use, improve efficiency of groundwater management, increase utilization of existing interties, expand the water supply reliability element consistent with agriculture water management plans and the Poso Creek IRWM Plan, assist the Region in adopting to climate change by expanding conjunctive management of multiple water supply sources, reduce energy required for conveyance, and reduce GHG emissions. The two DAC community projects will increase local water supply reliability through construction of a new well, storage tanks, and a system intertie, to ensure adequate and reliable delivery of safe drinking water for two DAC communities. Each DAC community will gain protection and access of safe drinking water. Each DAC is managing their drinking water supply to meet acceptable concentration levels for arsenic. Implementing the DAC projects increases the participation of DACs in the implementation component of the IRWM process, addresses the Human Right to Water Policy to ensure safe drinking water needs are met for small DAC communities and practices the advancement of the consideration of Human Right to Water needs within the Region by providing access to safe, clean, and affordable water, adequate for human consumption and cooking for the DAC communities.